



Serial No.: 09/163,993

**COPY OF PAPERS
ORIGINALLY FILED**

21/15(11)
RECEIVED

SEP 10 2002

GROUP 3600

CLAIMS

Please replace the claims with the following clean version of all claims in accordance with 37CFR §1.121(c)(1)(i). A marked up copy showing any changes to the claims is also attached as set forth in 37CFR §1.121(c)(1)(ii).

Sub F. 1. (UNCHANGED) A secure on-line printing method, comprising:
establishing a communication link between a first computer and a second computer;
executing a client software on said first computer, wherein said client software initiates a secure continuous communication link between said first computer and said second computer;
monitoring said secure continuous communication link between said first computer and said second computer;
terminating said client software when said secure communication link is not continuous;
sending a request for value bearing information from said client software to said second computer;
sending said value-bearing information from said second computer to said first computer in response to said request, while said secure communication link is continuous; and,

printing said value-bearing information while said secure continuous communication link persists.

2. (CANCELED)

3. (UNCHANGED) The method of claim 1 wherein said request comprises encrypted data.

4. (UNCHANGED) The method of claim 3 wherein said value-bearing item information comprises encrypted data.

5. (CANCELED)

6. (UNCHANGED) The method of claim 3 wherein said value-bearing information comprises an image of a postal indicium.

7. (UNCHANGED) The method of claim 6 wherein said request comprises a postage amount

8. (CANCELED)

9. (CANCELED)

*Cont
F1*

10. (UNCHANGED) The method of claim 1 wherein said sending said request for said value bearing information is in response to command from a user.

11. (CANCELED)

12. (UNCHANGED) The method of claim 7 wherein said second computer comprises a database containing user information.

13. (UNCHANGED) The method of claim 12 wherein said user information comprises financial information associated with said user.

14. (UNCHANGED) The method of claim 13 wherein said sending said request to said second computer further comprises accessing said user information to verify fund availability to cover said postage amount.

15. (CANCELED)

16. (CANCELED)

17. (CANCELED)

18. (UNCHANGED) The method of claim 14 wherein said value-bearing information comprises disabling a print spooler of a printer connected to said first computer.

ET 19. (ONCE AMENDED) The method of claim 18 further comprising said client software sending a print command to said printer when said secure continuous communication link disconnects.

Cont
P. 1 20. (UNCHANGED) The method of claim 1 wherein said value-bearing information comprise ticket information

21. (UNCHANGED) The method of claim 20 wherein said request comprises a ticket price.

22. (CANCELED)

23. (UNCHANGED) The method of claim 1 wherein said second computer sends authorization to said first computer in response to said request, said second computer accessing said user's financial information to verify funds availability.

24. (UNCHANGED) The method of claim 1 wherein said value-bearing information comprise check information.

25. (UNCHANGED) The method of claim 24 wherein said request comprises a check amount.

26. (CANCELED)

27. (UNCHANGED) The method of claim 1 further comprising:
accessing said user's financial information to verify funds availability to
cover said value-bearing information;
sending said authorization to said first computer.

28. (UNCHANGED) The method of claim 1 wherein said value-bearing information comprises coupon information.

29. (UNCHANGED) The method of claim 28 wherein said request comprises a coupon amount.

30. (CANCELED)

31. (UNCHANGED) The method of claim 1 wherein said information comprises certificate information.

32. (UNCHANGED) A secure on-line postage metering method comprising:

establishing a secure communication link between a user computer and a vendor computer;

providing a printer connected to said user computer;

executing an on-line postage metering software on said user computer wherein said on-line postage metering software determines if said secure communication link between said first computer and said second computer is continuous;

terminating said on-line postage metering software when said communication link is not continuous;

said on-line metering software sending a request for a print authorization to said vendor computer;

said vendor computer accessing a database to verify fund availability to cover said request;

said vendor computer sending data elements for a postage indicium to said first computer as a response to said request;

said on-line postage metering software sending a postage indicium graphic associated with said data elements to said printer while said secure continuous communication link persists.

33. (UNCHANGED) The method of claim 32 wherein said on-line postage metering software sending said request comprises encrypting said request.

34. (UNCHANGED) The method of claim 32 wherein said vendor computer sending said response further comprises encrypting said response.

35. (CANCELED)

36. (UNCHANGED) The method of claim 32 further comprising: said on-line metering software disabling a print spooler of said printer.

37. (CANCELED)

38. (CANCELED)

39. (UNCHANGED) The method of claim 32 wherein said on-line postage metering software sending said request for said print authorization is in response to a command from a user.

40. (CANCELED)

41. (UNCHANGED) The method of claim 32 further comprising said on-line postage metering software sending a print cancel command to said printer if said secure communication link is interrupted.

42. (THREE TIMES AMENDED) ~~A secure on-line postage~~
management system method comprising:
establishing a secure continuous communication link between a client
system and server system;
monitoring said secure continuous communication link between said
client system and said server system;
terminating client system software when said secure communication link
is not continuous;
said client system processing a user request for obtaining an indicium;
said client system securely communicating said user request to said server
system;
said server system processing said user request;
said server system securely communicating to said client system a
response to said user request;
said client system processing said response to obtain said indicium;
said client system obtaining said indicium while said secure continuous
communication link persists;
said client system printing said indicium while said secure continuous
communication link persists.

43. (UNCHANGED) The method of claim 42 wherein said client
system securely communicating with said server system comprises:

authenticating a user by establishing said secure communication link between said client system and said server system and verifying the authenticity of information exchanged;
continuously monitoring said secure communication link to verify said authenticity of information exchanged.

44. (ONCE AMENDED) The method of claim 43 wherein said authenticating said user comprises:
said client system obtaining a password;
securely sending said password to said server system;
said client system issuing a challenge to said server system;
said server system modifying said challenge cryptographically;
said client system verifying said modified challenge for proper authentication of the communication.

45. (UNCHANGED) The method of claim 44 wherein said sending said password comprises sending said password to said server using triple Data Encryption Standard (DES) of the SSL Internet protocol, thereby establishing an SSL triple DES communication session between said client system and said server system.

46. (UNCHANGED) The method of claim 45 wherein said client system issuing a challenge comprises issuing a 64 bit random number to said server system.

47. (UNCHANGED) The method of claim 46 wherein said server modifying said challenge comprises said server system digitally signing said challenge using a cryptographic module and a private key associated with said server system.

48. (UNCHANGED) The method of claim 47 wherein said client system verifying said modified challenge comprises using a public key corresponding to said private key associated with said server system to verify said digital signature of said challenge.

49. (UNCHANGED) The method of claim 43 wherein said continuously monitoring said secure communication link comprises:
said server system retrieving a password associated with said client system;
generating a message authentication code using said password associated with said client system;
sending said message authentication code and said challenge to said client system;

said client system verifying said authentication code using said challenge and said password associated with said client system.

50. (UNCHANGED) The method of claim 49 wherein said retrieving said password further comprises:

retrieving said password from a database;

decrypting said password if said password is encrypted.

51. (UNCHANGED) The method of claim 50 wherein said message authentication code is generated using said password associated with said client system.

52. (TWICE AMENDED) The method of claim 42 wherein said secure continuous communication link between said client system and said server system is established through a firewall.

53. (UNCHANGED) The method of claim 42 wherein said secure continuous communication between said client system and said server system is established via the Internet secure sockets layer (SSL) protocol.

54. (UNCHANGED) The method of claim 42 wherein said server system processing said user request takes place in a public network and a private network included within said server system.

55. (UNCHANGED) The method of claim 54 wherein said public network processes said user requests independently from said private network to protect the integrity of said server system.

56. (UNCHANGED) The method of claim 42 wherein said secure communication between said client system and said server system is encrypted.

57. (UNCHANGED) The method of claim 42 wherein said secure communication between client system and server system is encrypted by a United States Postal Service compliant cryptographic device.

58. (UNCHANGED) The method of claim 42 further comprising disabling said client system from obtaining said indicium if said secure continuous communication between client system and server system is discontinued.

59. (UNCHANGED) The method of claim 54 wherein said private network processes said user requests for making payments.

60. (UNCHANGED) The method of claim 59 wherein said private network processes said users requests for making payments further comprises

communicating with a financial management system for verification of availability of funds and fund transfer.

61. (UNCHANGED) The method of claim 42 further comprising said server system communicating with the United States Postal Central Meter Licensing System (USPS CMLS) for processing of user licensing information.

62. (UNCHANGED) The method of claim 61 further comprising registering a said user.

63. (THREE TIMES AMENDED) An on-line postage system for processing of user requests and obtaining postage indicia comprising:

- a client system for interfacing with a user;
- a server system in continuous and secure communication with said client system, said server system having an architecture comprising:
 - a communication server within a private network subsystem for communicating information to at least one financial management system;
 - a database server for storing user information within said private network subsystem;
 - a transaction server within a public network subsystem for processing of requests communicated to said server system by said client system;

a firewall for ensuring the integrity of said server system by restricting access between said public network subsystem and said private network subsystem;

a cryptographic hardware device for encrypting communication between said client system and said server system;

a continuous communication link with the United States Postal Service Central Meter Licensing System (USPS CMLS) for licensing a user;

a continuous communication link with a said at least one financial management system for processing user payments.

64. (UNCHANGED) The on-line postage system of claim 63 further comprising a system software down-loadable from said server system to said client system.

65. (UNCHANGED) The on-line postage system of claim 63 wherein said client system interfaces with at least one user.

66. (UNCHANGED) The on-line postage system of claim 63 wherein said server system is accessible through an Internet portal.

67. (UNCHANGED) The on-line postage system of claim 63 wherein said client system comprises administration software to monitor said client system.

Cont
68. (UNCHANGED) The method of claim 42 wherein said client system obtaining said indicium comprises:

maintaining a said continuous communication link between said client system and said server system; and
retrieving said indicium from said server system.

Cont
69. (TWICE AMENDED) A method comprising:
establishing a secure continuous communication link between a client system and a server system, wherein said client system comprises client system software;

monitoring said secure continuous communication link between said client system and said server system;

terminating said client system software when said secure communication link is not continuous;

said client system software, presenting one or more options for submitting at least one payment;

submitting said at least one payment to said server system software while said secure continuous communication link persists;

adding postage value corresponding to an amount of said at least one payment to user account;

printing at least one indicia representative of said postage value while said secure continuous communication link persists.

70. (UNCHANGED) The method of claim 69 further comprising:
deducting said amount from said user account.

71. (UNCHANGED) The method of claim 70 wherein said
deducting is performed upon authorization from said user.

72. (UNCHANGED) The method of claim 69 wherein said at least
one payment comprises credit card data.

73. (UNCHANGED) The method of claim 69 wherein said at least
one payment comprises electronic funds transfer data.

74. (TWICE AMENDED) A computer program product
comprising:

a computer readable medium having [client system] software embodied
therein, said software configured to:

establish a secure continuous communication link between a client system
and a server system comprising server system software, wherein said client
system comprises client system software configured to present one or more
options for submitting at least one payment;

monitor said secure continuous communication link between said client
system and said server system;

terminate said client system software when said secure communication
link is not continuous;

FI
cont'd

said client system configured to submit said at least one payment to said server system software while said secure continuous communication link persists between said client system and said server system;

said server system software configured to credit postage value corresponding to an amount of said at least one payment to a user account;

FI

said client system software printing at least one indicia representative of said postage value while said secure continuous communication link to said server system software persists.

75. (UNCHANGED) The computer program product of claim 74 further comprising said client system software configured to deduct said amount from said user account.

76. (UNCHANGED) The computer program product of claim 74 wherein said submitting is performed by said client system software upon authorization from said user.

FI

77. (UNCHANGED) The computer program product of claim 74 wherein said payment comprises credit card data.

78. (UNCHANGED) The computer program product of claim 74 wherein said payment comprises electronic funds transfer data.

79. (UNCHANGED) The computer program product of claim 74 wherein said secure continuous communication link utilizes Internet protocols to transfer data.

80. (UNCHANGED) The computer program product of claim 74 wherein said client system software prohibits transmission if said secure continuous communication link fails authentication.

81. (UNCHANGED) The computer program product of claim 74 wherein data transmitted between said client software and said server system software comprises encrypted information.